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*Text and photograph available at: <http://www.congatec.com/press>*

**New Product Introduction**

**congatec speeds up its COM Express Basic module portfolio with latest Intel® Xeon® and Gen 7 Intel® Core™ processors (codename Kaby Lake)**

**congatec boosts module-based high-end embedded computing**

**Deggendorf, Germany, January 3, 2017 \* \* \*** congatec – a leading technology company for embedded computer modules, single board computers and embedded design and manufacturing services – extends its COM Express Basic portfolio with the new high-performance conga-TS175 Computer-on-Module. Equipped with the high-end dual chip versions of the brand new Intel® Xeon® and Gen 7 Intel® Core™ processors (codename Kaby Lake), it sets a new benchmark for module-based high-end embedded computers and modular industrial workstations that need to process massive workloads.

Application areas for these high-end COM Express Type 6 Server-on-Modules can be found everywhere where data intensive streams need to be processed and displayed in real time. Target markets include big data processing embedded clouds, edge and fog servers, medical imaging systems, video surveillance and vision-based quality control, simulation equipment, host systems for virtualized control technology, vision systems in industrial control rooms and other plant-wide supervision systems or high-end professional gaming and digital signage.

Compared to their predecessors (codename Skylake), the new modules host increased CPU frequencies and performance, more dynamic HDR graphics thanks to 10-bit video codecs, and support super-fast 3D XPoint-based Intel® Optane™ memory. In comparison to the single chip variants of the new Gen 7 Intel® Core™ processors, the dual chip versions set the latest state-of-the-art benchmark for high-end Server-on-Module applications and high-end embedded use cases with hyper threading within the embedded power envelope of up to 45 Watts.

“The new modules will significantly change the way we leverage massive data streams because they support the new Intel® Optane™ memory which is based on 3D XPoint technology. It offers a significantly lower latency while handling the same size of data packets compared to NAND SSDs, and compared to standard HDDs, its latency of just 10 µs is even a thousand times lower. As a consequence, the responsiveness of applications such as Big Data processing, High-Performance Computing, virtualization, data storage, clouds and computer games can be massively improved by utilizing Computer-on-Modules that support this very fast, cost effective and non-volatile memory,” explains Martin Danzer, Director Product Management at congatec.

**The feature set in detail**

The new conga-TS175 COM Express Basic module is available with two quadcore Intel® Xeon® processors with hyper threading as well as 5 different Intel® Core™ i7, i5 and i3 processors within a 45 to 25 W TDP envelope. Bandwidth intensive applications will benefit from up to 32 gigabytes of fast dual channel 2400 DDR4 memory – including ECC support option. In regards to visual experience, they feature the new Intel® HD630 graphics supporting up to three independent displays with up to 4k @ 60 Hz via DisplayPort 1.4 and HDMI 2.0 – both with HDCP 2.2, and eDP 1.4 support. Additionally, the modules also offer dual channel LVDS and VGA for legacy displays. Thanks to hardware-accelerated 10-bit encoding/decoding and high dynamic range of HEVC and VP9, HD streams are becoming more vivid and lifelike in both directions.

The modules offer all the common I/O interfaces of the Type 6 pinout. Powerful system extensions including Intel® Optane™ memory can be connected via PCI Express Gen 3.0 Lanes. 4x SATA 6G ports with RAID0/1 support are available for conventional storage media. Further I/O interfaces include 1x Gigabit Ethernet with Intel® AMT support, 4x USB 3.0, 8x USB 2.0, HDA, 4x GPIOs, LPC, SPI, I2C Bus, and 2x UART. The modules support the 64-bit versions of Microsoft Windows 10 and Windows 10 IoT as well as all common Linux operating systems. Individual integration support, an extensive range of accessories as well as optional Embedded Design & Manufacturing Services for individual carrierboard and system designs complete the package.

The new conga-TS175 COM Express Basic modules can be ordered in the following standard configurations:

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| **Processor** |  | **Cores / Threads** |  | **Intel® Smart Cache [MB]** |  | **Clock/ Burst****[GHz]** |  | **TDP** **[W]** |
| **Intel® Xeon® E3-1505M v6** |  | 4/8 |  | 8 |  | 3.0/4.0 |  | 45/35 |
| **Intel® Xeon®™ E3-1505L v6** |  | 4/8 |  | 8 |  | 2.2/3.0 |  | 25 |
| **Intel® Core™ i7-7820EQ** |  | 4/8 |  | 8 |  | 3.0/3.7 |  | 45/35 |
| **Intel® Core™ i5-7440EQ** |  | 4/4 |  | 6 |  | 2.9/3.6 |  | 45/35 |
| **Intel® Core™ i5-7442EQ** |  | 4/4 |  | 6 |  | 2.1/2.9 |  | 25 |
| **Intel® Core™ i3-7100E** |  | 2/4 |  | 3 |  | 2.9 |  | 35 |
| **Intel® Core™ i3-7102E** |  | 2/4 |  | 3 |  | 2.1 |  | 25 |

Further information on the new COM Express Basic conga-TS175 Server-on-Modules is available at: <http://www.congatec.com/en/products/com-express-type6/conga-ts175.html>

**About congatec AG**Headquartered in Deggendorf, Germany, congatec AG is a leading supplier of industrial computer modules using the standard form factors COM Express, Qseven and SMARC as well as single board computers and EDM services. congatec’s products can be used in a variety of industries and applications, such as industrial automation, medical, entertainment, transportation, telecommunication, test & measurement and point-of-sale. Core knowledge and technical know-how includes unique extended BIOS features as well as comprehensive driver and board support packages. Following the design-in phase, customers are given support via extensive product lifecycle management. The company’s products are manufactured by specialist service providers in accordance with modern quality standards. Currently congatec has entities in the USA, Taiwan, China, Japan and Australia as well as in the United Kingdom, France and the Czech Republic. More information is available on our website at [www.congatec.com](http://www.congatec.com) or via [Facebook](http://www.facebook.com/Congatec), [Twitter](https://mobile.twitter.com/congatecAG) and [YouTube](http://www.youtube.com/congatecAE).

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